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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,337	07/10/2003	Jennifer Samproni	036249-5006	5011
9629 7590 06/19/2007 MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			EXAMINER NOGUEROLA, ALEXANDER STEPHAN	
			ART UNIT 1753	PAPER NUMBER
			MAIL DATE 06/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/617,337	Applicant(s) SAMPRONI, JENNIFER	
	Examiner ALEX NOGUEROLA	Art Unit 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment of March 29, 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 10, 13-15, 20, 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed March 29, 2007 ("Amendment") have been fully considered but they are not persuasive.

Applicant asserts,

"No. 05-60724 requires the presence of a chloride ion-selective sensing material which is separate and distinct from the described mixture of a polythiol epoxy resin and a polyamide epoxy resin. Stated differently, No. 05-60724 does not either teach or suggest that the polythiol epoxy resin or polyamide epoxy resin may have chloride ion-selective properties – thus, the requirement of a separate chloride ion-selective material in the composition of No. 05-60724. In contrast, Applicants have discovered that the particular group of amine agents recited in claim 1 can function as chloride ion exchanges or chloride ion-selective agents as well as a curing agent for the epoxy resin, thus eliminating the need for a separate chloride ion-selective material." See page 6 of the Amendment.

Use of the amine agents recited in Applicant's claims as the chloride ion selective agent eliminates the need to employ additional chloride ionophores or chloride ion exchange agents such as quaternary ammonium compounds. See page 7 of the Amendment.

Thus, Applicant acknowledges that the chloride ion-selective sensing membrane in No. 05-60724 comprises a mixture of polythiol epoxy resin and a polyamide epoxy resin. Applicant's alleged invention is the discovery that a mixture of polythiol epoxy resin and a polyamide epoxy resin can itself act as chloride ion exchangers or chloride

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ion-selective agents. This discovery cannot be the basis for patentability of the claimed invention, however, for two reasons. The first reason is that all of the independent claims use the transitional term "comprising" in describing the membrane composition, which "... is inclusive or open-ended and does not exclude additional, unrecited elements or method steps." See MPEP 2111.03. So other materials having chloride ion-selective properties, such as disclosed by No. 05-60724 or Craig, are not excluded from the chloride ion-selective sensing membranes of these references. The second reason against patentability is that "A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present." See MPEP 2111.01 II. In other words, the properties of a mixture of polythiol epoxy resin and a polyamide epoxy resin are inherent to the mixture and exist whether these properties are mentioned by No. 05-60724 or not. That No. 05-60724 may alter the ratio of amine agent to epoxy agent for a different reason than Applicant, such as providing a stoichiometric excess of polyamine to make the membrane less susceptible to interference from hydrophilic ions, does not exclude the property of enhanced chloride selectivity from also arising.

With regard to the rejections of claims 3-9 and 11, the original rejections still hold as these claims are still in product-by-process format, with an unspecified final product. What is different about the products resulting the claimed processes of these claims from the compounds disclosed by No. 05-60724?

For the reasons set forth above all of the previous rejections are maintained.

***Status of the Rejections pending since the Office action of
November 29, 2006***

2. All of the previous rejections are withdrawn.

Final Rejection

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alex Nogueraola
Primary Examiner
AU 1753
June 16, 2007